

WHAT IS CLAIMED IS:

1. A vehicle headlamp apparatus comprising:

left-right deflecting means for deflecting an optical axis
of illumination of a headlamp in a left-and-right direction in
5 correspondence with a steering angle of a vehicle;

vertically deflecting means for deflecting the optical
axis of illumination of said headlamp in a vertical direction;
and

deflection controlling means for effecting the operation
10 of setting the optical axis of said headlamp by said left-right
deflecting means at a time when the optical axis of illumination
of said headlamp is in a state of being oriented in a lower
direction than the horizontal direction by said vertically
deflecting means.

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2. A vehicle headlamp apparatus according to claim 1,
wherein the left-right deflecting means includes a drive motor
which drives the headlamp in the left-and-right direction, and

the deflection controlling means includes a sensing
20 element which outputs pulse signals in response to rotation of
the drive motor, and an up-down counter which counts number of
the pulses.

3. A vehicle head lamp apparatus according to claim

2, wherein the deflection controlling means sets the optical axis of said headlamp based on a rotation range is obtained from a first counting number of the up-down counter when the drive motor is rotated in one direction and a second counting number
5 of the up-down counter when rotated in the opposite direction.

4. A method of setting an optical axis position of a vehicle headlamp apparatus including left-right deflecting means for deflecting an optical axis of illumination of a headlamp
10 in a left-and-right direction in correspondence with a steering angle of a vehicle and vertically deflecting means for deflecting the optical axis of illumination of said headlamp in a vertical direction, the method comprising the steps of:

effecting the operation of setting the optical axis by
15 said left-right deflecting means at a time when the optical axis of illumination of said headlamp is in a state of being oriented in a lower direction than the horizontal direction by said vertically deflecting means at the time of setting the optical axis position of said headlamp to a reference angular position;
20 and

completing the operation of setting the optical axis by said vertically deflecting means after completion of the operation of setting the optical axis by said left-right deflecting means.

5. The method of setting an optical axis position according to claim 4, wherein after starting the operation of said vertically deflecting means, the operation of said left-right deflecting means is started after the lapse of a first predetermined time.

6 The method of setting an optical axis position according to claim 4, wherein after starting the deflecting operation of said vertically deflecting means in a downwardly oriented manner, the deflecting operation of said vertically deflecting means in an upwardly oriented manner is started after the lapse of a second predetermined time.

7 The method of setting an optical axis position according to claim 5, wherein after starting the deflecting operation of said vertically deflecting means in a downwardly oriented manner, the deflecting operation of said vertically deflecting means in an upwardly oriented manner is started after the lapse of a second predetermined time.